# **TECHNICAL DATA SHEET**



## SG502 Silicone Grease

Description Property Test Method Value

This is a highly thermally conductive silicone grease / compound. This property together with a low moisture and metallic impurity content makes it a suitable heat sink product for a wide variety of applications within the electronics and electrical industries.

**Key Features** 

· Thermally conductive

Low volatility

· Good dielectric and isolating properties

Low bleed even at elevated temperatures

**Application** 

Thermally Conductive

**Use and Cure Information** 

**Typical Applications** 

This grease has a relatively soft consistency and high extrusion rate that facilitates application by syringe into small gaps. This allows it to be used when mounting semi-conductor devices on heat sinks, obviating air gaps between imperfectly mating surfaces. In this application, it may be used in conjunction with electrically insulating mica washers without increasing electrical leakage in any way.

Used within a semi-conductor device casing it affords excellent shock protection for diode elements and provides protection against inadvertent contamination of these elements before the devices are finally encapsulated

**Product** Bleed % 0.2 % Color **Pale Grey** Density BS ISO 2781 2.90 g/cm3 200 °C / 392 °F Max Working Temp -50 °C / -58 °F Min Working Temp Rheology **Paste** Silicone Yes/No Yes 3 W/mK Thermal Conductivity Weight Loss % 0.2 %

**Electrical Properties** 

Dielectric Constant ASTM D-150 4.9

Dielectric Strength (V/mil) 277 V/mil

Dielectric Strength kV/mm ASTM D-149 18 kV/mm / 457 V/mil

Dissipation Factor ASTM D-150 0.0033

Volume Resistivity (Ohms ASTM D-257 1.1E+15 ohms cm

cm)

Storage

Shelf Life 12 mths

#### How to Use

Minor surface cracking of the grease on long term storage is not a defect, but typical of this type of product. This effect disappears as soon as the surface is disturbed. If syringes are to be filled for injection of the product, care should be taken to avoid entrapment of air. All equipment used to handle the product can be cleaned readily with white spirit or other hydrocarbon solvents.

### **Health & Safety**

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Safety Data Sheets available on request.

#### **Packaging**

CHT Greases are available in a variety packaging including bulk containers. Please contact our sales department for more information.

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